

6. *Adolias cocytina*, Horsfield.

♂. *A. Cocytina*, Horsfield, Zoological Journal (1855), p. 67, pl. 4. figs. 3, 3a.

♀. Alæ supra velut in *A. Gopia scriptæ*; minores, maculis discalibus anticarum albis fusco magis tinctis, posticarum punctiformibus.

Alæ subtus magis ochraceæ, maculis inferioribus discalibus anticarum magis elongatis; serie macularum in posticis magis ad marginem approximantibus; aliter velut in *A. Gopia* ♀.

Purchased of Mr. Stevens. Sumatra. ♂ ♀, B.M.

XVII.—*Observations on Sea-Bears (Otariadæ), and especially on the Fur-Seals and Hair-Seals of the Falkland Islands and Southern America.* By Dr. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S. &c.

THE Sea-Bears (*Otariadæ*) inhabit the more temperate and colder parts of the southern hemisphere, and the temperate and more northern regions of the Pacific Ocean.

Navigators, from the general external resemblance of the animals, have regarded the Sea-Lion and Sea-Bear of the northern and southern regions as the same animal. Pennant (who paid considerable attention to Seals) and most modern zoologists did the same.

Nilsson, in his excellent Monograph of the Seals, only mentions three species of Eared Seal:—1. *Otaria jubata*, 2. *O. ursina*, and 3. *O. australis*. He believed that the first was common to the Falkland Islands, Chile, Brazil, New Holland, and Kamtschatka, and the second to Magellan's Straits, Patagonia, New Holland, and the Cape. We now know that the species have a very limited geographical distribution.

When I published my 'Catalogue of the Seals in the British Museum,' in 1850, I was satisfied from Steller's description that the species he described from the arctic regions were distinct from those found in the southern seas; and when I at last succeeded in obtaining specimens and skulls from the northern regions of the Pacific, I not only found that my idea was confirmed, but that they did not even belong to the same genera. I had the skulls of these species figured in the 'Proceedings of the Zoological Society' for 1859, and thus greatly extended the knowledge of the animals. But there is yet much to be learnt respecting them. We do not know the species of Fur-Seal described by Forster as inhabiting the coast of New Zealand.

As a proof of how little the Eared Seals or Sea-Bears were formerly understood, we have only to refer to Fischer's 'Syn-

opsis,' where, after quoting the description of Forster's Sea-Bear in Cook's Voyage, and his figures in the Supplement to Buffon, vi. p. 536, t. 47, Fischer adds, as a note, "An non potius generi *Enhydri*s adnumeranda?" (see p. 232).

The skull of these animals changes so much in form as the animal arrives at adult and old age, that it is not always easy to determine the species by it, unless you have a series of them, of different ages and states, to compare. Thus Dr. Peters, in his revision of the genus after the publication of my Catalogue and figures of the skulls in the 'Voyage of the Erebus and Terror' and in the 'Proceedings of the Zoological Society,' formed no less than five species from the skulls of the southern Sea-Lion (*Otaria jubata*)—*O. jubata*, *O. Byronia*, *O. leonina*, *O. Godeffroyi*, and *O. Ulloa*,—referring the first four to the subgenus *Otaria*, and the last to *Phocarcetos* (see Monatsbericht, May 1866, pp. 265, 270). In his second essay, published a few months later (*ibid.* Nov. 1866), after his visit to London, he placed them all together in one subgenus (*Otaria*), and seems, by the way in which he has numbered four of them, to doubt their distinctness. It would have been better if he had at once simply reduced them to synonyms (as they must be reduced) and included with them *O. Ulloa*, which is only the skull of a young specimen, such as was called *O. molossina*, Lesson & Garnot. I may observe that I had shown in my first 'Catalogue of Seals' (1850), from the examination of the typical skull, that two or three of these nominal species were only very old or young skulls of the southern Sea-Lion.

It is the character of the Eared Seals or *Otariadæ* to have a very close, soft under-fur between the roots of the longer and more rigid hairs. They are therefore called *Fur-Seals* by the sealers, and are hunted for their skin as well as for their oil. The quantity and fineness of the under-fur differ in the various species; and the skin and under-fur bear a price in the market according to the country and the species from which they are obtained.

Some species of the family have so little under-fur when they arrive at adult age, that they are of no value in the market to be made into "seal-skins;" these are therefore called *Hair-Seals* by the sealers. They are only collected for the oil, as the skins are of comparatively little value.

The skins of the Fur-Seal are much used in China, and are more or less the fashion in this country, sometimes being far more expensive than at others. The skins of the Hair-Seals are only used, like the skins of the Earless Seals or *Phocidæ*, for very inferior purposes, as covering boxes, knapsacks, &c.; but the animals are much sought after for the oil they afford.

The furs of the different species of Fur-Seals are exceedingly different in external appearance, especially in the younger specimens, or when the fur is in its most perfect condition. In most species the hairs are much longer than the under-fur; they are flat and more or less rigid and crisp. In others the hairs are short, much softer, scarcely longer than the soft woolly under-fur; in these species the fur is very dense, standing nearly erect from the skin, forming a very soft elastic coat, as in *O. falklandicus* and *O. Stelleri*. The hair of *O. nigrescens* is considerably longer than that of *O. cinerea*, but not so harsh, the fur of the half-grown *O. nigrescens* being longer, sparse, flat, rather curled at the end, giving a crispness to the feel; while the hairs of the very young specimens are abundant, nearly of equal length, forming an even coat that is soft and smooth to the touch.

Difficult as it is for the zoologist to distinguish the species by their external appearance, the skins of the different species of Fur-Seals are easily distinguished by the dealers, even when they are wet, showing that the practical fellmonger is in advance of the scientific man in such particulars, as the dealers in whalebone were in regard to the distinction of the species of whale by their baleen (see Zool. Erebus & Terror).

At the Dyster, Nalden, & Co. public sale of Cape Fur-Seals they are subdivided into large, middling, and small "wigs" (these are males with a mane), "middlings" and "smalls" (females and young males), large, middling, and small "pups" (these are half-grown), and black "pups" (very young animals). They are imported salted in casks.

The longer hairs of the Fur-Seals are very slender and pale-coloured at the basal half of their length, and thicker and darker at the upper half, and often have a white tip. The basal half is subcylindrical, the upper half is flat, tapering at each end. The absolute length of the hairs and the length as compared with the length of the under-fur differ in the various species. Judging from the old and young specimens of *A. nigrescens*, the hairs seem to be longer, both absolutely and relatively to the under-fur, in the young than in the adult animals. The hairs of the Hair-Seal are shorter, flat, channelled above, and gradually tapering from the base to the tip, merely contracted at the insertion into the skin. The breadth of the hairs seems to vary in the different species; and in the younger specimens there are to be observed some soft hairs like the under-fur of the Fur-Seals.

The Falkland Islands is a sealing-station, and is the home of several species, the southern Sea-Bear (*Otaria jubata*) and a Hair-Seal (*O. Hookeri*) being found there, as well as the

two Fur-Seals for which the "fishery" is chiefly established. Capt. Abbot says that the Fur-Seals of the Falkland Islands are of various colours—some grey, others blackish. There are in the British Museum two most distinct species of Fur-Seal from the Falklands, which must be of very different value,—one the *Otaria falklandica* of Shaw, and the other *O. nigrescens*.

All the five species of Sea-Bears or Eared Seals found in South America have been called *O. falklandica*. I will proceed to distinguish them.

I. Pennant describes the "Falkland-Island Seal," from a specimen 4 feet long, in the museum of the Royal Society, thus:—"Hair short, cinereous, tipped with dirty white;" "grinders conoid, with a small process on one side near the base." It is to this description that Dr. Shaw applied the name of *Phoca falklandica* (Gen. Zool. i. 256). This agrees with a specimen in the Museum in all particulars. It certainly is not the dark blackish-brown Seal which I have described as the *Arctocephalus nigrescens*, and which Dr. Peters calls *O. falklandica*.

A specimen of a Seal about 3 feet long has been in the British Museum for several years. It was obtained from a dealer as a Fur-Seal from the Falkland Islands. This skin is mentioned in the 'Catalogue of Seals in the British Museum,' at page 43, as *Arctocephalus falklandicus*, or "the skin of an adult female without skull," believing that it was similar to the specimen of the Falkland Seal that was in the Leverian Museum, described by Pennant as above quoted, to which description Shaw appended the name of *Phoca falklandica*.

Mr. R. Hamilton, in the 'Annals of Natural History' for 1838, vol. ii. p. 81, t. 4, gives a history of the Fur-Seal of commerce and an account of the catching of them. He deposited two female specimens of this Seal in the Museum of the University of Edinburgh. He says the two specimens are nearly alike in every respect, and describes them thus:—"The hair is very soft, smooth, and compact, of a brownish-black colour towards the roots and a greyish-white towards the tips; it extends considerably beyond the fur, and gives the general colouring to the hide. The fur itself is uniform brownish white above, and of a somewhat deep brown colour beneath, and is quite wanting on the extremities. The colour of the body is of a uniform whitish grey above, passing gradually underneath into a reddish-white colour, which is deepest in the abdominal region." This is certainly the *Falkland Seal* of Pennant. Capt. Weddell says that the males of the Fur-Seals are much larger than the females, an adult male measuring  $6\frac{3}{4}$  feet, and the female not more than  $3\frac{1}{2}$  feet in length.

1. *Arctocephalus falklandicus*.

Fur very soft, elastic; hairs very short, exceedingly close, slender at the base, thicker above, with close reddish under-fur nearly as long as the hair; the upper surface pale, nearly uniform grey, minutely punctulated with white; hairs brown, upper half black, with minute white tips. The nose, cheeks, temples, throat, chest, sides, and underside of the body yellowish white.

*Falkland Seal*, Penn. Quad. ii.

*Phoca Falklandica*, Shaw, Gen. Zool. i. p. 256 (from Pennant).

*Otaria Falklandica*, Desm. Mamm. 252 (from Pennant; not Peters or Burmeister).

*Otaria Shawii*, Lesson, Dict. Class. d'H. N. xiii. p. 424 (from Pennant).

*Arctocephalus Falklandicus*, Gray, Cat. Mamm. in Brit. Mus., Seals, p. 42.

*Fur-Seal of commerce* (*Otaria falklandica*), Hamilton, Ann. & Mag. Nat. Hist. 1838, ii. p. 81, t. 4; Jardine, Nat. Lib. vi. p. 271, t. 25 (not Peters).

*Hab.* Falkland Islands. Brit. Mus.

This is a most distinct species, and easily known from all the other Fur-Seals in the British Museum by the evenness, shortness, closeness, and elasticity of the fur, and the length of the under-fur. The fur is soft enough to wear as a rich fur, without the removal of the longer hairs, which are always removed in the other Fur-Seals. Unfortunately the specimen is without any skull; and therefore I cannot give a description of the teeth, or refer it to any of the restricted genera of *Otariadae*.

In the British Museum there is a skull of a young *Arctocephalus* (No. 311 a) like the skull of Capt. Abbot's specimen, but in a much younger state. It was presented to the Museum by Sir John Richardson as the "skull of the Fur-Seal from the Falklands." The teeth in the skull belonging to Capt. Abbot's skin are much larger than they are in the one received from Sir John Richardson. The fifth or last grinder in the series of the lower jaw, that was being developed, but which had not yet cut the gums or been raised above the alveolus, is divided into three lobes, the middle lobe being the largest and most external, the lateral ones being on the inner side of it. In Sir John Richardson's specimen, the same tooth in the lower jaw is triangular, compressed, with regular, sloping, sharp-edged sides, and has only a small lobe on the lower part of the hinder edge, which is on the same plane as the rest of the tooth. It looks like the skull of a large species. The tentorium of this skull of a young animal is well developed and bony. If the habitat assigned to this skull is the correct one (and I have no reason to doubt it), it is probably the skull of a very young *Arctocephalus falklandicus*, with the grey back and white underside: it is certainly not the skull of *A. nigrescens*.

Cuvier (Ossem. Fossiles, v. p. 220) describes an Eared Seal, purchased of M. Hauville, of Havre, as coming from the Falkland Islands, thus:—"Elle est longue de quatre pieds deux pouces, d'un cendré en dessous, blanchâtre aux flancs et sous la poitrine, une bande d'un brun rouge règne le long du dessous du ventre et une bande noirâtre va transversalement d'une nageoire à l'autre." It has been called *Otaria Hauvillii* (Lesson, Dict. Class. xiii. 425) and *Phoca Hauvillii* (Fischer, Syn. Mamm. 254). Cuvier adds that this specimen has been indicated by M. de Blainville (Journ. de Phys. xci. p. 298) under the name of *Otarie de Péron*. This animal is probably the same as the one mentioned by Pennant, and in the British Museum. The streaks on the lower part of the body were probably only an accidental or individual variation. The specimen in the British Museum is uniform white below, without any indication of a longitudinal streak or cross band.

II. The British Museum contains the skin and skull of a large blackish Eared Seal, nearly 6 feet long, that was purchased of a dealer as "a Fur-Seal from the Falkland Islands;" but, as the dealers seem always to give that as the habitat for all the seal-skins with a distinct under-coat that come into their possession, I have quoted the habitat with doubt. When occupied in describing the Seals of the southern hemisphere for the 'Voyage of the Erebus and Terror,' I named this Seal *Arctocephalus nigrescens*, and had the skull figured under that name; but the plate has not yet been published, though copies of it have been given to Dr. Peters and other zoologists. In the 'Proceedings of the Zoological Society' for 1859, pp. 109, 360, and in the 'Catalogue of Seals and Whales,' I described the skull of this species. There is also in the Museum a skull of a younger animal of the same species.

Capt. Abbot, in 1866, sent to the British Museum a large and a small Seal from the Falkland Islands. The large one was examined and determined to be the Southern Sea-Lion (*Otaria jubata*). The small one, nearly three feet long, was very similar in external appearance; and as the teeth, which could be seen without extracting the skull, showed that it was a young animal, it was regarded as the young of the Sea-Lion, and it was stuffed without extracting the skull, and labelled as such. This specimen has been examined by several zoologists, among the rest by Dr. Peters, when engaged with his paper on Eared Seals, and has passed unchallenged until this time, thus showing how difficult it is to distinguish these animals by their external characters alone. Capt. Abbot, who is now residing in England, informed me that the smaller specimen was the

Fur-Seal of the Falkland Islands, that it grows to about half as long again as the specimen sent, and that the old males are grey from the tips of the hairs. I have therefore had the skull extracted from the specimen; and there is no doubt that it is quite distinct from the Sea-Lion (*Otaria jubata*); and, on more careful examination of the skin, I have little doubt, from the colour and the character of the fur, that it is a young specimen of the Seal that I described as *Arctocephalus nigrescens*. It is interesting as confirming the accuracy of the habitat that I received with that specimen, and which until this time I considered doubtful, as Pennant and others describe the Falkland-Island Fur-Seal as grey, and white beneath. Capt. Abbot's young specimen chiefly differs from the adult one in the Museum in the hairs being longer, more erect, and with minute white tips, and in the face, throat, and chest being rufous brown; but this reddish colour is common to the young of several Sea-Bears.

Dr. Peters, on the authority of this habitat (which I have always quoted with doubt), has given the name of *Arctophoca falklandica* to the animal and skull on which I established my *Arctocephalus nigrescens*.

In the British Museum there is the skin of a very young Seal which was presented by Sir John Richardson as the Falkland-Island Fur-Seal, with the observation appended that the adult is 5 feet long, and its skin is worth fifteen dollars. It is without its skull. The fur of this young Seal is dark brown, reddish beneath, and very like that of the young specimen sent by Capt. Abbot; but the hairs are smoother, and the white tips to them are longer and more marked, giving the animal a more grizzled appearance.

There is another young Eared Seal, very like the former, which was received with General Hardwicke's collection (who, no doubt, purchased it of a dealer), said to have come from the Cape of Good Hope. I suspect this habitat must be erroneous; for it is very unlike what I recollect of the young of the Cape Eared Seals, which are called "Black Dogs," on account of the blackness of their colour. Unfortunately we have no specimen of the latter in the Museum Collection. General Hardwicke's specimen only differs from Sir John Richardson's in being less punctulated with white; fewer hairs have a white tip, and the tip is shorter.

Both these young specimens differ from the half-grown one obtained from Capt. Abbot in the fur being softer and smooth to the touch; and Capt. Abbot's specimen differs from the adult in the length and greater crispness of its fur, the fur of the old one being harsh and hard and closer pressed.

2. *Euotaria nigrescens*, Gray,

Ann. &amp; Mag. Nat. Hist. 1866, xviii. p. 236.

The synonymy of this species will be—

*Arctocephalus nigrescens*, Gray, Zool. Erebus and Terror, t. ; P. Z. S. 1859 pp. 109, 360; Cat. Seals and Whales, p. 52; Gerrard, Cat. of Bone. p. 147.

*Arctocephalus (Euotaria) nigrescens*, Gray, Ann. & Mag. Nat. Hist. 1866, xviii. p. 236.

*Otaria (Arctocephalus?) Falklandica*, Peters, Monatsb. 1866, p. 273.

*Otaria (Arctophoca) Falklandica*, Peters, Monatsb. 1866, p. 671.

*Hab.* Falkland Islands, Volunteer Rock (Capt. Abbot).

In the first essay, Dr. Peters places *Phoca falklandica*, Shaw, and *Otaria nigrescens* together, with doubt, observing that one was known from the skin and the other by the skull, overlooking the fact that the name *nigrescens* implied that I had seen the colour of the fur, which was not that given by Shaw to his animal; in his second essay, Dr. Shaw's, Dr. Burmeister's, and my animal are all classed together without any doubt.

The skull of Capt. Abbot's Fur-Seal from the Falkland Islands shows that it was a very young animal, which had only developed its first grinders, the permanent series being developed below them. The tentorium is bony and well-developed. The teeth are the same in position and number as they are in the adult skull; and the upper ones, as far as developed, are small and conical, except the fifth upper grinder, which is largest, triangular, with a single subconical lobe on the base of the hinder edge of the cone. The lower canines are small, scarcely larger than the cutting-teeth, which are nearly uniform in size. The lower grinders are of a much larger size than the upper ones in the adult skull, as if they belonged to the permanent series: they are of the same form as the teeth in adult skulls; but the central cone is higher and more acute, and the anterior and posterior lobes at the base of the cone are more developed and acute, the lobes of the last or fifth grinder being larger and rather on the inner surface of the tooth.

The skull of Capt. Abbot's animal is evidently not the same as the skull of a young Eared Seal described and figured by Dr. Burmeister as the skull of *Arctocephalus falklandicus* from the mouth of the Rio de la Plata, in the Ann. & Mag. Nat. Hist. ser. 3. vol. xviii. p. 99, t. 9, which, from the appearance of the grinders, I suspect is the young skull of *Phocarcos Hookeri*, the Hair-Seal of the Falkland Islands.

There is a considerable difference in the proportions of the skull sent by Capt. Abbot from those of the one figured by



Dr. Burmeister. In Capt. Abbot's specimen the brain-case from the back edge of the orbit to the occiput is as long as the length of the face from the same edge of the orbit to the end of the nose. In Dr. Burmeister's figure, the face from the same point is much longer than the brain-case.

III. On the return of the 'Erebus' and 'Terror,' the British Museum received from the Lords of the Admiralty several skins of a Hair-Seal from the Falkland Islands and the Antarctic Sea, of a brownish-grey colour and paler beneath, which I described under the name of *Arctocephalus Hookeri*, and figured the skull. Unfortunately we had no very definite habitat for some of the specimens. All the skins were preserved in salt.

3. *Phocartos Hookeri*, Gray,

Ann. & Mag. Nat. Hist. 1866, xviii. p. 234.

Fur brown grey, slightly grizzled, pale, nearly white beneath; hairs short, close-pressed, rather slender, flattened, black, with whitish tips, the tips becoming longer on the under part of the sides; feet reddish or black; whiskers black or whitish.

Young pale yellow, varied with darker irregular patches; length 18 inches. B.M.

*Arctocephalus Hookeri*, Gray, Zool. Erebus and Terror, t. 14, 15 (skull); Cat. Seals B. M. p. 45. f. 15; P. Z. S. 1859, pp. 109, 360; Cat. Seals and Whales, B.M. p. 54.

*Arctocephalus Falklandicus*, Burmeister, Ann. & Mag. N. H. 1866, xviii. t. 9. f. 1, 2, 3, 4 (skull only).

Young or albino? entirely cream-coloured, about 2 feet long.

*Eared Seal*, Pennant, Quad. ii. p. 278.

*Phoca flavescens*, Shaw, Gen. Zool. i. p. 260, t. 73 (from Pennant).

*Hab.* Falkland Islands.

Pennant, in his 'Quadrupeds,' describes an Eared Seal, rather more than 2 feet long, the whole body of which was covered with longish hair of a whitish or cream-colour; it was brought from the Straits of Magellan, and preserved in Parkinson's Museum on the south side of Blackfriar's Bridge (see "Eared Seal," Pennant's Quad. ii. p. 278). Dr. Shaw, in his 'General Zoology,' gave the name of *Phoca flavescens* to this species, and figured it (i. p. 260, t. 73).

This is very probably the young of the Hair-Seal of the Falklands, described by me as *Arctocephalus Hookeri*, which is of a pale-yellowish colour. Pennant does not mention the want of the under-fur.

Dr. Burmeister observes:—"We have in the Museum [at

Buenos Ayres] a young half-grown specimen [of *Arctocephalus falklandicus*] nearly 3 feet in length. From this I have taken the skull, of which I send you a description and drawings." (Ann. N. H. 1866, xviii. p. 99, t. 9. f. 1, 2, 3, 4.) From the comparison of the figures, and especially of the teeth and the form of the palate, with our older skull of *Arctocephalus Hookeri*, I have little doubt that it is the skull of a specimen of that species before the grinders were all developed. It is not the skull of *Otaria jubata*, which the other specimen he called *A. falklandicus* is, as proved by the form and position of the hinder nasal openings. The figure of the young skull differs from the older skull of *A. Hookeri* in the British Museum in having a notch in the middle, while the older skull of *A. Hookeri* has a conical prominence in the same place. Such differences are found in skulls of Seals at different ages.

IV. In 1865, a French sailor named Leconte, serving on board the 'Paulina,' of Buenos Ayres, brought to England a young male Sea-Bear that was captured near Cape Horn, in the month of June 1862. A female he had obtained shortly afterwards had not survived to reach Europe. Having been previously shown in France, in England it was first exhibited in the Cremorne Gardens, Leconte having taught it several tricks, such as ascending a ladder, firing off a pistol, and sitting in his lap and kissing him, rewarding it for each of its tricks with a piece of fish. The animal was at length purchased by the Zoological Society, and Leconte retained to attend to it. It is well figured in the 'Illustrated London News,' the 'Boy's own Book,' and in the 'Proceedings of the Zoological Society' for 1866, p. 80.

The animal died in 1867; and Dr. Murie has undertaken to give an account of its anatomy, which I look for with much impatience, as I am not aware that the anatomy of the family has ever been given. Leconte has been sent by the Society to the Falkland Islands in hopes that he may bring to Europe some other Seals of the southern hemisphere.

When I first saw this Seal, on account of its short fur, dark colour, and yellow nape, I named it *Otaria jubata*; and it was so named for a time in the Zoological Gardens; afterwards Mr. Sclater determined it to be the *Arctocephalus Hookeri*, and figured it as such (P. Z. S. 1866, p. 80), overlooking the pale colour of the fur of that species.

Dr. Burmeister (Ann. Nat. Hist. 1866, xviii. p. 99) says the Sea-Lion (*Otaria jubata*) and *Arctocephalus falklandicus* are the only Seals "found in the Atlantic near the mouth of the Rio de la Plata. They were formerly common on the small

islands at the mouth of the river," the Islas de los Lobos (Islands of Sea-wolves). "They not unfrequently come up as far as Buenos Ayres, where I have twice seen full-grown living specimens of *A. falklandicus*. Both of these were, I believe, carried to France. . . . They were kept here for a long time in a large basin of fresh water; and I was one of the daily visitors to these very interesting animals.

"We have in the Museum a young half-grown specimen, nearly 3 feet in length." He figures the skull of this specimen, which is evidently the skull of a *Phocarcetos Hookeri*.

The two living specimens mentioned are doubtless those which Leconte brought to Europe.

I have, since this paper was commenced, received the skull of the specimen that died in the Gardens, and find that it is a half-grown, rather stunted *Otaria jubata*, and may be thus described:—

Fur dark brown; cheeks, temples, and sides of forehead black; neck greyish brown; back of the neck yellow brown; belly dusky black. Hairs flat, tapering, dark brown, yellow, and whitish intermixed, without any under-fur.

The following synonyms may be added to those of the species in the 'Catalogue of Seals and Whales:—

*Sea-Bear*, Illustrated London News; Boy's Own Book.

*Otaria jubata*, Label in Zool. Gardens, 1865.

*Otaria Hookeri*, Selater, P. Z. S. 1866, p. 80 (figure, young male).

*Arctocephalus falklandicus*, Burmeister, Ann. Nat. Hist. 1866 (not skull).

*Hab.* Cape Horn (Leconte). Skin and skeleton, B.M.

This animal has the harsh fur without any under-fur of *Phocarcetos Hookeri*; but it entirely differs from that animal in the colour of the fur. This cannot arise from the greater age of the animal, as it is not nearly so large as the half-grown *P. Hookeri* in the British Museum.

In the dark blackish-brown colour of the fur and the pale-brown colour of the nape, and in the absence of the under-fur, this Seal resembles the adult *Neophoca lobata* from Australia; but in that species the pale colour extends all over the crown, while in the young male *Otaria jubata* there are only a few paler scattered hairs on the middle of the crown and nose.

V. I must refer to another species of Sea-Bear which has been mixed up with the Fur-Seal of the Falkland Islands.

In the 'Monatsbericht,' May 1866, p. 276, t. 2. *a, b, c*, Dr. Peters described and figured with considerable detail a skull of a Sea-Bear (sent to the Berlin Museum by Dr. Philippi, who obtained it at Juan Fernandez Island) under the name of *Otaria Philippi*, forming for it a subgenus which he calls *Arctophoca*.

In his revision of that paper, published in the same work for November 1866, page 671, he places it as a synonym or subspecies of what he calls *Otaria falklandica*, which is my *Arctocephalus nigrescens*, and not the *Otaria falklandica* of Shaw nor the *Otaria falklandica* of Burmeister as Dr. Peters supposes, as I have shown above. In this paper he removes *Otaria falklandica* (that is, *nigrescens*) from the subgenus *Phocartos*, to which he referred it in his first paper, and places it in his subgenus *Arctophoca*.

I have not seen the skull; but I believe, from the figure, that this alteration is a mistake. The figure of the skull of his *Otaria Philippii* has no resemblance to the skull of my *Otaria nigrescens*. It is more nearly allied to the skull of *Otaria Stelleri* from California, agreeing with it in having a vacant space with a pit in the bone between the fourth and fifth upper grinders on each side, looking as if a grinder had fallen out and the cavity had been filled up.

The subgenus *Arctophoca* of Dr. Peters's first essay, not as modified in his second one to contain *O. falklandica* (*nigrescens*), chiefly differs from Gill's genus *Eumetopias*, which was formed on my description and figure of the skull of *Otaria Stelleri* (or *californiana*), in the fifth upper grinder not being so far back, but in a line with the back edge of the orbital process of the zygomatic arch, instead of far behind it as it is in *Eumetopias*.

XVIII.—On the Occurrence of *Diplommata Huttoni* and *Ennea bicolor* in the West Indies. By WILLIAM T. BLANFORD, F.G.S., C.M.Z.S.

IN the 'Annals and Magazine of Natural History' for August 1867, Mr. R. J. Lechmere Guppy described the occurrence in Trinidad of *Diplommata Huttoni*, Pfr., and suggested that its presence and that of *Ennea bicolor*, Hutton, might be accounted for by supposing both to have migrated across the Tertiary Atlantis. I cannot help thinking that there are several circumstances opposed to this view; and in order to explain them it is necessary to describe the distribution of *Diplommata Huttoni* and *Ennea bicolor* in India.

*Diplommata Huttoni* has hitherto only been found on the lower slopes of a portion of the Western Himalayas, near Masúri. It is true that the Himalayas have not been explored to a sufficient extent to justify the assertion that the shell does not exist elsewhere; but, as not a single Western Himalayan *Diplommata* has as yet been found in those parts of the Eastern Himalayas about Darjiling which have been comparatively well explored, nor, *vice versâ*, a solitary Darjiling species in the Western Himalayas, it is extremely improbable